

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A system for transferring multimedia information from a source location to a destination location through one or more networks, the system comprising:
 - a source ~~output~~ input adapted to ~~provide~~ receive a first stream of information in a first protocol characterized by one of a plurality of source capabilities;
 - a destination ~~input~~ output adapted to ~~receive~~ transmit a second stream of information in a second protocol characterized by one of a plurality of destination capabilities, the second protocol being a different protocol than the first protocol;
 - a proxy transcoder server ("PTS") coupled between the source ~~output~~ input and the destination ~~input~~ output, wherein the PTS is adapted to perform transcoding of multimedia system protocols, one or more audio streams, and one or more video streams, the multimedia system protocols selected from the group consisting of H.323, H.324, and SIP, the PTS comprising:
 - a call signaling interface module adapted for call setup associated with multimedia system protocols selected from the group consisting of H.323, H.324, and SIP;
 - a capability exchange module adapted to:
 - determine a first set of common capabilities between the PTS and a source terminal associated with the first stream of information through a first capability negotiation process, the first capability negotiation process comprising receiving the plurality of source capabilities and transmitting a first plurality of capabilities;
 - determine a second set of common capabilities between the PTS and a destination terminal associated with the second stream of information through a second

capability negotiation process, the second capability negotiation process comprising transmitting the second set of capabilities and receiving a second plurality of capabilities; and
identify a source capability of the plurality of source capabilities; and
identify ~~[[one]]~~ a destination capability of the plurality of destination capabilities;

a selection module adapted to select a transcoding process based upon the ~~first set of common capabilities~~ source capability and the ~~second set of common capabilities~~ destination capability;

a media channel processing module ~~adapted to calculate a quality measure independent of feedback from the destination terminal associated with the second stream of information;~~

a rate control module coupled to the media channel processing module adapted to vary an output bit rate ~~[[in]]~~ during an existing session associated with the second stream of information; and

a real-time transcoding module coupled to the rate control module and adapted to use the selected transcoding process and the output bit rate to process the first stream of information.

2. (Previously Presented) The system of claim 1 wherein the one or more networks are selected from a group comprising the Internet, a mobile network, a wide area network, a local area network, PTSN, ISDN, and SONET.

3. (Canceled).

4. (Previously Presented) The system of claim 3 wherein the capability exchange module identifies at least one of the output and input of the first device, based on information stored in the device, based on user subscription information stored in a network database of the user's service provider, based on in-band information command and control within a stream exchanged, or pre-set by the service provider.

5. - 8. (Canceled).

9. (Previously Presented) The system for claim 1 wherein the rate control module detects the quality measure by using in-band bit-rate instructions.

10. (Previously Presented) The system for claim 1 wherein the rate control module regulates the output bit rate by changing transcoding parameters.

11. (Previously Presented) The system for claim 1 wherein the rate control module regulates the output bit rate by instructing network equipment to give a higher priority to data being handled by the PTS than other data.

12. - 15. (Canceled).

16. (Previously Presented) The system of claim 1 wherein the PTS further comprises an intellectual property rights management module to manage and process information on intellectual property rights.

17. (Previously Presented) The system of claim 1 wherein the PTS further comprises a encryption and decryption process to encrypt and decrypt the data.

18. (Previously Presented) The system for claim 1 wherein the rate control module regulates the output bit rate dynamically and in real time.

19. (Previously Presented) The system of claim 1 wherein the real-time transcoding module is programmable to transcode between various types of capabilities for the source output and various types of capabilities for the destination input.

20. - 27. (Canceled).

28. (Previously presented) The system of claim 1 wherein the H.324 multimedia system protocol comprises 3GPP-324M.

29. - 30. (Canceled).

31. (Previously presented) The system of claim 1 wherein the capability exchange process utilizes H.245.

32. (Previously presented) The system of claim 1 wherein the capability exchange process utilizes SDP.

33. (Previously presented) The system of claim 1 further comprising:
a second source output adapted to provide a third stream of information in the first protocol characterized by one of a plurality of source capabilities; and
a second real-time transcoding module adapted to use a second transcoding process to process the third stream of information, wherein:

the capability exchange module is further adapted to determine one or more characteristics of a second media channel coupled to the second source output and adapted to support the third stream of information; and

the selection module is further adapted to select the second transcoding process.

34. (Previously Presented) The system of claim 33 wherein the first media channel comprises a video channel and the second media channel comprises an audio channel.

35. (Previously Presented) The system of claim 1 wherein the second stream of information comprises a transcoded stream of media converted for transport in the second protocol.

36. (Previously Presented) The system of claim 1 further comprising performing a second capability exchange process defined by the second protocol to provide one destination capability of the plurality of destination capabilities.

37. (Previously Presented) The system of claim 36 wherein the second capability exchange process translates one or more of the plurality of source capabilities to provide one or more of the plurality of destination capabilities.

38. - 42. (Canceled).